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# **New Hampshire**

## **Oral Health Data, 2003**

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New Hampshire Department of Health and Human Services  
Division of Public Health Services  
Bureau of Community Health Services  
Rural Health and Primary Care Unit  
Oral Health Program

# **New Hampshire Oral Health Data, 2003**

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Department of Health and Human Services

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## MESSAGE FROM THE COMMISSIONER

The oral health of the citizens of the state of New Hampshire is a critical issue to the Department of Health and Human Services. The impact to our state in terms of productivity of missed work and school due to poor oral health is staggering. We need to get the message to our residents that taking care of their teeth, gums and mouth is truly important.

The Department is working diligently to improve access to oral healthcare for the people of New Hampshire. We feel this is a significant portion of the overall health picture for the state, and one DHHS takes seriously.

I would like to thank the Division of Public Health Services for their work in producing a comprehensive report on oral health. The Department's dedicated public health staff has done an excellent job in developing a report that identifies both our strengths and those areas where we can improve. They deserve credit for their efforts.

John A. Stephen, Commissioner  
New Hampshire Department of Health and Human Services

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## EXECUTIVE SUMMARY

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**Dental Visits** – In 2002, 77% of adults in New Hampshire had visited a dentist during the past year. There were statistically significant associations between visiting a dentist and age, income and education level. Persons 25-64 years of age were more likely to have seen a dentist than persons 65 or more years of age. As a person's income and education increased, they became more likely to have seen a dentist in the past year.

**Tooth Loss** -- In 2002, 17% of New Hampshire adults had lost 6 or more teeth due to decay or gum disease. Tooth loss was strongly associated with age; 22% of persons  $\geq 65$  years of age had lost all of their teeth. There were strong associations between tooth loss and both income and education. For example, 39% of adults with less than a high school education had lost 6 or more teeth due to decay or gum disease compared to 8% of adults with a college education.

**Insurance Coverage** – Data on lack of dental insurance comes from two surveys, both conducted in 2001. The Family Insurance Survey found that 25% of persons less than 65 years of age in the state lacked dental insurance. The Behavioral Risk Factor Surveillance System found that 40% of all adults lacked dental insurance.

**Fluoridation** -- There are currently 10 communities in New Hampshire that fluoridate their public water supply. Approximately 43% of New Hampshire residents served by a community water system receive fluoridated water.

**School-Based Dental Programs** -- During the 2002-2003 school year, there were sixteen school-based dental programs in New Hampshire. A total of 7,609 2<sup>nd</sup> and 3<sup>rd</sup> grade students were screened. Among these children, 24% had untreated decay, 51% had a history of decay (i.e., either untreated or treated decay), and 39% had dental sealants.

**Oral Health Status of 2<sup>nd</sup> and 3<sup>rd</sup> Grade Students** -- Results of a statewide survey of 3<sup>rd</sup> grade students in 2001 indicated that 22% had untreated decay, 52% had a history of decay (i.e., either untreated or treated decay), and 46% had sealants.

**Oral Cancer** -- Based on data from the state cancer registry, there were 138 new cases of oral cancer in New Hampshire in 2000. Two-thirds of cases occurred in males. There were 37 deaths from oral cancer in the state in 2001. Males comprised 68% of the total. It is estimated that 75% of oral cancer is attributable to tobacco and alcohol use.

## INTRODUCTION

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With the release of *Oral Health in America: A Report of the Surgeon General* (1), there has been renewed interest in oral health as a public health issue. The Surgeon General's report highlighted the connection between oral health and overall health. It also documented the magnitude of the oral health problem in this country and the marked disparities in oral health among different population groups.

Shortly after release of the Surgeon General's report, the *National Oral Health Surveillance System (NOHSS)* was established (2). An objective of *Healthy People 2010* (#21-16) is to have an oral health surveillance system in every state. NOHSS is a joint effort of the Centers for Disease Control and Prevention and the Association of State and Territorial Dental Directors. The purpose of NOHSS is to monitor the burden of oral health disease, use of the oral health care delivery system, and the status of community water fluoridation. NOHSS includes eight oral health indicators: dental visits, teeth cleaning, complete tooth loss, fluoridation status, caries experience, untreated caries, dental sealants, and cancer of the oral cavity and pharynx.

This document is the third annual compilation of data on oral health from the New Hampshire Department of Health and Human Services. It is an attempt to pull together current information and to make it readily available. The focus of the report is the oral health status of adults and children in New Hampshire and their access to care including preventive services. All eight indicators from NOHSS are included in this report.

These oral health data can be used for multiple purposes: 1) to document the magnitude of the public health problem, 2) to monitor disease trends over time, 3) to detect changes in health care practices, 4) to evaluate prevention strategies, and 5) to facilitate planning. The data in this report can be used in assessing progress towards our goal of improving the oral health of the state's residents.

## **NEW FEATURES IN THIS REPORT**

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- Data from the Behavioral Risk Factor Surveillance System for both New Hampshire and the United States for 2002 are presented. Together with data from the past three years, these allow for examination of trends within the state and between New Hampshire and the nation.
- Updated information on hospital- and community-based dental programs is included in this year's report.
- Data from school-based dental programs for 2002-2003 are presented. Trends in untreated decay, caries experience, and sealants are examined for a four-year period.
- Updated information on oral cancer incidence and mortality are included in this year's report.

## • FREQUENTLY ASKED QUESTIONS

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### *What is a sealant?*

A dental sealant is a plastic material that is usually applied to the top surface of permanent molars in children. By filling in the pits and fissures of the tooth, the sealant is effective in preventing cavities. Sealants gained approval from the American Dental Association in the mid-1970's. By 1994, all states had included sealants as a benefit in their Medicaid programs.

### *What is water fluoridation?*

Fluoridation is the controlled addition of a fluoride compound to a public water supply to bring its fluoride concentration to an optimal level to prevent cavities. Numerous studies have shown that a fluoride concentration of approximately 1 part per million in drinking water can be an effective method of preventing tooth decay. Two-thirds of the US population on a public water supply currently receives fluoridated water.

### *What is edentulism?*

Edentulism is the loss of all of a person's natural teeth. Edentulism, especially in the elderly, is often used as a measure of the oral health status of a population. Approximately one-quarter of persons 65 years or older in the United States are edentulous.

### *Why are data not presented by race or ethnicity?*

Based on the 2000 United States Census, New Hampshire's population is approximately 96.0% white, 1.3% Asian, 0.7% African American, 0.2% American Indian, and 0.6% persons reporting some other race. About 1.7% of the population is of Hispanic or Latino origin. Because no single racial or ethnic minority group exceeds 1.7% of the total population, the number of oral health-related events in these groups is too small to allow meaningful analysis. As the state's demographics change and as data collection techniques improve, it may be possible to present data on racial and ethnic minorities in the future.

### *What are the Centers for Disease Control and Prevention?*

The Centers for Disease Control and Prevention (CDC) are part of the United States Department of Health and Human Services. CDC is considered the nation's prevention agency; it focuses on public health measures to prevent disease, disability, and death. CDC provides funds and guidance to states for their oral health efforts.

*I would like to see data for a specific town, but cannot find this information in the report. Why doesn't this report show town-level data?*

New Hampshire has a relatively small population of 1.2 million people divided among 234 cities and towns. In a given year, the number of oral health-related events is too small to generate meaningful results at a town level.

*Some of the information in the report is identified as "age-adjusted". What does this mean and why is it done?*

To compare populations where the distribution of age groups is different, an adjustment needs to be made. For example, the rate of cancer in New Hampshire may appear higher than that of the United States. However, this may be due to New Hampshire having proportionally more older people than the United States. By age-adjusting the data using the 2000 United States standard population, the rates can be compared without concern about differences in the age distribution of the two populations.

## METHODS

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Data from surveys are presented with 95% confidence intervals. Because the data were collected from a sample of the population, each estimate has a margin of error. The confidence interval reflects the degree of uncertainty for each estimate. For example in Table 1, 77.3% of respondents reported having their teeth cleaned in the past year with a 95% confidence interval of 75.9% - 78.6%. This can be interpreted to mean that our best estimate is that 77.3% of adults in New Hampshire had their teeth cleaned during the previous 12 months, but the true value could actually be as low as 75.9% or as high as 78.6%. In other words, the estimate from the survey has a margin of error of +/- 1.3%.

Where appropriate, oral health-related objectives from *Healthy People 2010* or *Healthy New Hampshire 2010* are given to put current data from New Hampshire in perspective. *Healthy People 2010* is a set of national health targets for the next decade (3). *Healthy New Hampshire 2010* is a set of state-specific health targets (4).

## **DATA SOURCES**

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### Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a population-based, random-digit dialed telephone survey of civilian, non-institutionalized adults, aged 18 years and older. The survey is coordinated by the Centers for Disease Control and Prevention (CDC) and is conducted annually by all states. In New Hampshire, the Health Statistics and Data Management Section is responsible for the survey. The BRFSS includes questions on health behavior risk factors such as safety belt use, diet, weight control, oral health, diabetes, alcohol use, physical exercise, and preventive health screenings. The data are weighted to more accurately reflect the population by accounting for age, gender, geographic location, and probability of selection. A core set of questions, including those related to oral health, is asked every three years. Additional questions on oral health can be asked annually in an optional module. In New Hampshire, 5,039 interviews were completed in 2002. For 1999, the national estimates were calculated as a mean by pooling all BRFSS data as a sample of the nation as a whole. For 2002, the national estimates were simply a calculation of the middle value of all the state estimates (the median). A mean is a better estimate of a national average than is a median value. New Hampshire and national data can be accessed on line at: <http://www.cdc.gov/brfss/>. Information on edentulism among the elderly based on BRFSS data is available at <http://www.cdc.gov/nohss/>. Additional information on the New Hampshire BRFSS is available on-line at: <http://www.dhhs.nh.gov/DHHS/BHSDM> or by calling (603) 271-5926.

### Family Insurance Survey

This survey was conducted by the Office of Health Planning and Medicaid in the New Hampshire Department of Health and Human Services in 2001-2002 with funding from the Health Resource and Service Administration. The survey was conducted by telephone. A total of 5,177 families were interviewed. Data were obtained for persons less than 65 years of age. Additional information is available on-line at: <http://www.dhhs.nh.gov/DHHS/HPR/LIBRARY/Program+Report-Plan/insurance-surveys.htm>.

### Healthy New Hampshire 2010

*Healthy New Hampshire 2010* is New Hampshire's health promotion and disease prevention agenda for the first decade of the 21<sup>st</sup> century. Similar to *Healthy People 2010*, it is a compilation of health objectives for the next decade. A copy of *Healthy New Hampshire 2010* can be obtained on-line at: <http://www.healthynh2010.org/>.

### Healthy People 2010

*Healthy People 2010* is a set of national health targets for the next decade. It builds on initiatives pursued over the past two decades including the 1979 Surgeon General's Report, *Healthy People*, and *Healthy People 2000: National Health Promotion and*

*Disease Prevention Objectives.* It is designed to achieve two overarching goals: 1) increase quality and years of healthy life; and, 2) eliminate health disparities. A copy of Healthy People 2010 can be obtained on-line at: <http://www.health.gov/healthypeople/>.

#### Hospital- and community-based dental programs

In 2002-2003, there were nine hospital- or community-based dental programs in New Hampshire. These programs see dental patients who would otherwise have no access to dental care. Both restorative and preventive services are provided in these programs.

#### School-based dental programs

During 2002-2003, there were 16 school-based dental programs in New Hampshire. Many of the individual programs cover schools in several towns. Approximately 24% (7,609/31,067) of students in 2<sup>nd</sup> and 3<sup>rd</sup> grades in public schools in New Hampshire were screened in school-based dental programs during the 2002-2003 academic year. Programs receive funding from a variety of sources: local charities, the state oral health program, hospitals, and local government. Most programs focus their efforts on children who have no usual source of dental care. Preventive services, such as oral health education, proper nutrition, fluoride and sealants, are emphasized in most programs.

#### State Cancer Registry Data

Statistical information on newly diagnosed primary cancers is reported to the New Hampshire State Cancer Registry. This database is comprised of information on reportable cancers from New Hampshire acute care hospitals and their tumor registries, medical records departments, oncology departments, physicians, and private pathology laboratories. The Registry has agreements for exchange of case information with the states of Massachusetts, Maine, Vermont, Rhode Island, Connecticut, New York, and Florida. The New Hampshire State Cancer Registry is operated by the Norris Cotton Cancer Center under a contract between the State and Dartmouth Medical School. The Health Statistics and Data Management Section in the New Hampshire Department of Health and Human Services analyzes the records of newly diagnosed cases of cancer (incidence data) collected by the New Hampshire State Cancer Registry. Information from the 1999 state cancer report is available on-line at: <http://www.dhhs.nh.gov/DHHS/BHSDM/LIBRARY/>.

#### Third Grade Oral Health Survey

The survey was conducted from February-April, 2001. The survey design was adopted from a standard protocol from the *Basic Screening Surveys* (8). The survey sample was selected using *PCSample* software which utilizes probability proportional to size sampling. The sample consisted of 27 schools with 507 students enrolled in selected classrooms. Twenty-six (96.3%) schools participated in the survey and 410 (80.9%) students were examined. The overall participation rate was 77.9%. A report on the

survey was published in the MMWR on March 29, 2002 (volume 51, number 12, pages 259-260) (9). An electronic copy of the report is available at:  
<http://www.cdc.gov/mmwr/PDF/wk/mm5112.pdf>

### Vital Statistics

New Hampshire law requires that reports of all birth, death, fetal death, marriage, and divorce be filed with the office of the State Registrar in the Division of Vital Records Administration of the Department of State. The Health Statistics and Data Management Section analyzes these data. Depending on the event, filings are made by hospital personnel, physicians, funeral directors, city/town clerks, attorneys, and clerks of the courts. Reports of New Hampshire resident births and deaths in other states, and Canada, are provided to the State Registrar, for statistical purposes only, under an inter-state/Canadian agreement for the exchange of vital events information. The 1998 New Hampshire Vital Statistics Report may be accessed on-line at:  
<http://www.dhhs.nh.gov/dhhs/bhsdm/library>.

For death certificates, the cause of death reported is the underlying cause of death. In a death record, the underlying cause of death is the specific disease, condition, or injury that initiated the chain of events leading to death. The underlying cause of death is not always the same as the immediate cause of death. For example, if a person was hospitalized for oral cancer, but developed pneumonia and died while in the hospital, the underlying cause of death would be oral cancer. Additional information on deaths in New Hampshire is available at: <http://www.dhhs.nh.gov/dhhs/bhsdm/library>

### Water Fluoridation Reporting System

The Water Fluoridation Reporting System (WFRS) is maintained by the Centers for Disease Control and Prevention, the New Hampshire Department of Health and Human Services, and the New Hampshire Department of Environmental Services. The data were last updated in 2001. The system contains fluoridation information for each public water system in the state. Additional information is available on-line at:  
<http://apps.nccd.cdc.gov/mwf/index.asp> and at <http://gis.cdc.gov/doh/default.asp>

### Youth Tobacco Survey

During October and November of 2001 the New Hampshire Youth Tobacco Survey (NHYTS) was conducted in public middle and high schools. Middle school was defined as grades six through eight and high school as grades nine through twelve. A two-stage cluster sample design was used to produce a representative sample of students. In the first stage, 50 middle schools and 50 high schools were randomly selected. In the second stage, classes were randomly selected from within the participating schools. All students in the selected classes were eligible to participate. The 2001 NHYTS used a pencil and paper questionnaire consisting of 81 multiple-choice-questions. Students completed a self-administered questionnaire in the classroom, recording their answers on an answer sheet. Results were obtained anonymously and the overall response rate was 73% for

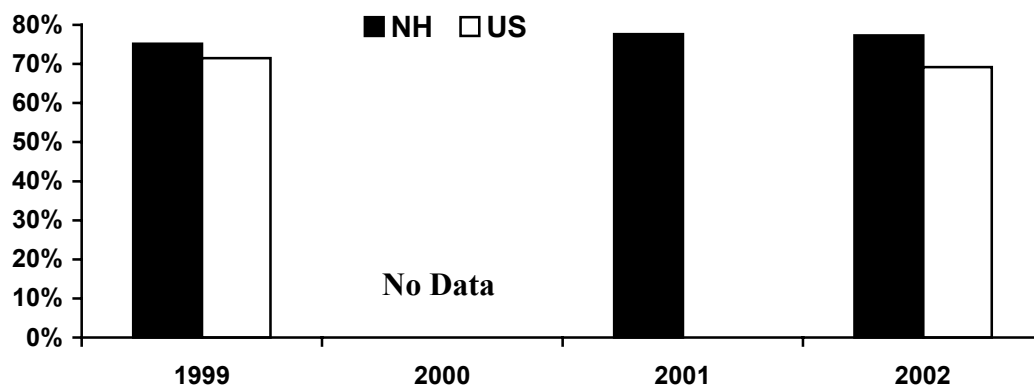
middle schools and 63% for high schools. Results of the 2001 survey are available on-line at: <http://www.dhhs.nh.gov/dhhs/tpcp/library>.

## BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

**Table 1. Adults who reported having their teeth cleaned by a dentist or dental hygienist within the past year – New Hampshire, 2002**

	Percent	95% Confidence Interval
All	77.3	75.9-78.6
Male	75.3	73.1-77.4
Female	79.1	77.3-80.8
18-24 years	74.3	68.6-79.9
25-34 years	74.3	70.7-77.8
35-44 years	77.8	75.0-80.5
45-54 years	81.4	78.6-84.1
55-64 years	79.9	76.5-83.2
65+ years	75.3	71.7-78.8
<\$15,000	48.7	41.2-56.1
\$15,000-24,999	63.6	58.7-68.5
\$25,000-34,999	68.7	64.1-73.2
\$35,000-49,999	76.3	72.7-79.8
\$50,000+	86.2	84.4-87.9
<12 years of education	53.8	46.3-61.2
12 years of education	69.7	66.9-72.4
13-15 years of education	78.8	76.2-81.3
16+ years of education	86.1	84.3-87.8

**Figure 1. Adults who reported having their teeth cleaned by a dentist or dental hygienist within the past year – New Hampshire, 1999-2002 and United States, 1999 and 2002**



**Comment:** There were statistically significant associations between teeth cleaning and income and education level. Those with higher incomes were more likely to have had an annual cleaning than those with lower incomes. College graduates were more likely to have had their teeth cleaned during the past year than were persons with less education.

Seventy-seven percent of adults in New Hampshire reported having had their teeth cleaned in the past year, which compares favorably to the national estimate of 69.2% from 2002. Connecticut reported the highest percentage of people who had a teeth cleaning within the past year (80.0%); Texas had the lowest percentage (58.0%) in 2002.

**Method:** People who had never visited a dentist or dental clinic and those who had lost all of their teeth were not asked this question. Data analysis excluded persons who responded “Don’t Know/Not Sure” or “Refused” to this question. Data were available for New Hampshire for 1999, 2001 and 2002 and for the United States for 1999 and 2002.

**Healthy People 2010:** Objective #21-10 is to increase the proportion of children and adults who use the oral health care system each year to 56%. This objective uses data from the Medical Expenditure Panel Survey which is not comparable to data from the Behavioral Risk Factor Surveillance System.

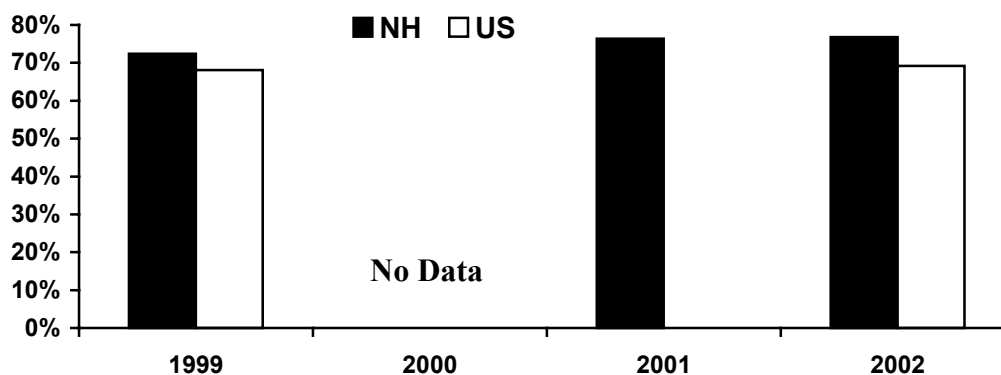
**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Table 2. Adults who reported visiting a dentist or dental clinic within the past year for any reason – New Hampshire, 2002**

	Percent	95% Confidence Interval
All	76.8	75.4-78.1
Male	75.2	73.0-77.3
Female	78.2	76.4-79.9
18-24 years	75.1	69.4-80.7
25-34 years	77.6	74.2-80.9
35-44 years	79.9	77.3-82.4
45-54 years	81.4	78.8-83.9
55-64 years	76.1	72.7-79.4
65+ years	67.3	63.7-70.8
<\$15,000	48.7	42.2-55.1
\$15,000-24,999	63.5	58.9-68.0
\$25,000-34,999	69.9	65.5-74.2
\$35,000-49,999	77.2	73.6-80.7
\$50,000+	86.5	84.7-88.2
<12 years of education	50.9	44.6-57.1
12 years of education	70.7	67.9-73.4
13-15 years of education	78.2	75.6-80.7
16+ years of education	86.5	84.7-88.2

**Figure 2. Adults who reported visiting a dentist or dental clinic within the past year for any reason – New Hampshire, 1999-2002 and United States, 1999 and 2002**



**Comment:** There were statistically significant associations between visiting a dentist and age, income, and education. Persons 25-64 years of age were more likely to have visited a dentist than persons 65 or more years of age. As a person's income increased they were more likely to have seen a dentist in the past year. Increasing educational attainment was also associated with having seen a dentist during the past year.

Seventy-seven percent of adults in New Hampshire reported visiting a dentist or dental clinic in the past year, which compares favorably to the national estimate of 69.2% from 2002. Connecticut reported the highest percentage of people who had visited a dentist within the past year (80.2%); Texas had the lowest percentage (60.0%) in 2002.

**Method:** This question was asked of all survey participants. Data analysis excluded persons who responded "Don't Know/Not Sure" or "Refused" to this question. Data were available for New Hampshire for 1999, 2001 and 2002 and for the United States for 1999 and 2002.

**Healthy People 2010:** (Objective #21-10) Increase the proportion of children and adults who use the oral health care system each year to 56%. National data for this objective were obtained from the Medical Expenditure Panel Survey and therefore cannot be compared directly to results from the Behavioral Risk Factor Surveillance System.

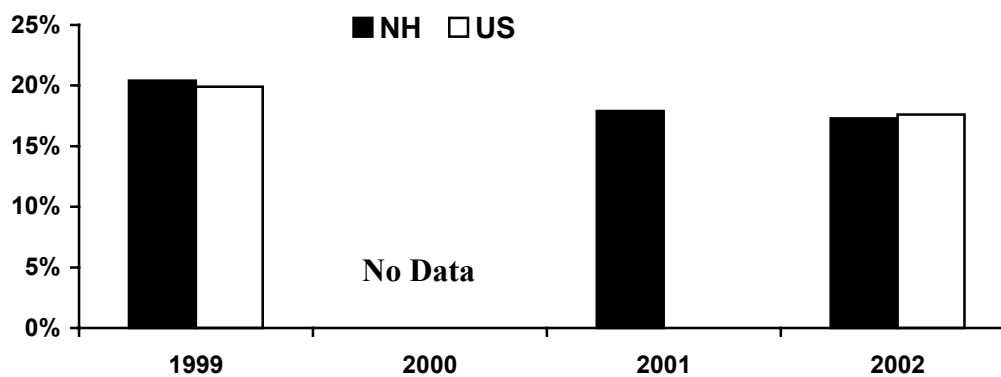
**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Table 3. Adults who have lost 6 or more teeth due to decay or gum disease – New Hampshire, 2002**

	Percent	95% Confidence Interval
All	17.3	16.1-18.4
Male	17.2	15.4-18.9
Female	17.5	15.9-19.0
18-24 years	0.6	0.0-1.3
25-34 years	3.0	1.4-4.5
35-44 years	8.3	6.3-10.2
45-54 years	16.8	14.2-19.3
55-64 years	33.6	29.6-37.5
65+ years	46.7	42.9-50.4
<\$15,000	42.9	36.4-49.3
\$15,000-24,999	29.6	25.4-33.7
\$25,000-34,999	23.3	19.3-27.2
\$35,000-49,999	18.2	15.0-21.3
\$50,000+	8.0	6.6-9.3
<12 years of education	39.2	33.1-45.2
12 years of education	23.6	21.2-25.9
13-15 years of education	16.4	14.2-18.5
16+ years of education	8.0	6.6-9.3

**Figure 3. Adults who have lost six or more teeth due to decay or gum disease – New Hampshire, 1999-2002 and United States, 1999 and 2002**



**Comment:** There were strong associations between tooth loss and age, income, and education. Tooth loss, especially edentulism (i.e., loss of all teeth), can reduce quality of life, self-image, and daily functioning; it is preventable with good oral hygiene, fluoridated water, and regular dental care. Patient and provider attitudes towards tooth retention also play an important role.

Seventeen percent of adults in New Hampshire reported having lost six or more teeth due to decay or gum disease, which is approximately the same as the national estimate of 17.6% from 2002. Utah reported the lowest percentage of people who had lost six or more teeth due to decay or gum disease (10.4%); West Virginia had the highest percentage (33.8%) in 2002.

**Method:** This question was asked of all survey participants. Data analysis excluded persons responding “Don’t Know/Not Sure” or “Refused” to this question. Data were available for New Hampshire for 1999, 2001 and 2002 and for the United States for 1999 and 2002.

**Healthy People 2010:** The *Healthy People 2010* objective is to increase the proportion of adults aged 35 to 44 years who have never had a permanent tooth extracted because of dental caries or periodontal disease to 42% (#21-3). In 2002 in New Hampshire, 64.0% of persons 35 to 44 years of age had never lost a permanent tooth due to decay or gum disease.

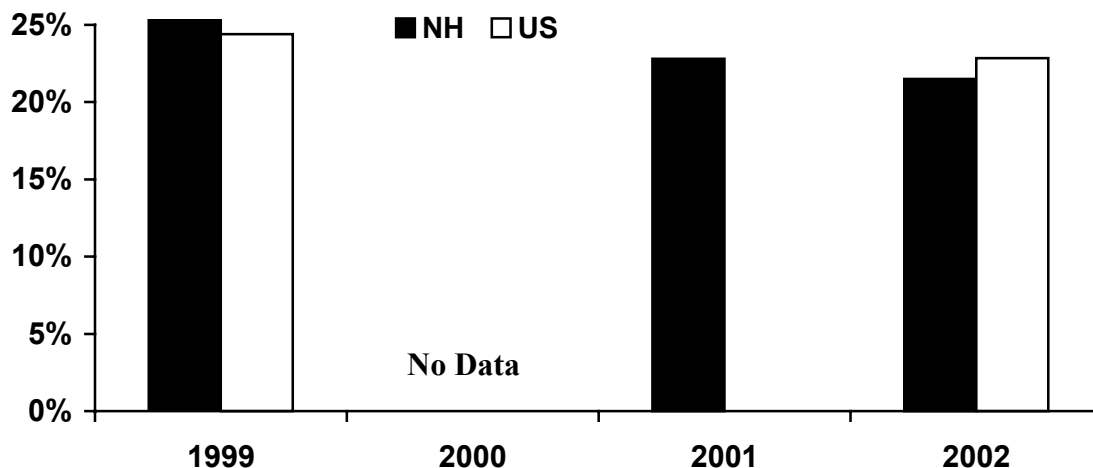
**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Table 4. Adults aged 65 years and older who have lost all of their natural teeth due to decay or gum disease – New Hampshire, 2002**

	Percent	95% Confidence Interval
All	21.5	18.4-24.7
Male	20.9	16.1-25.7
Female	22.0	17.8-26.2
<\$15,000	40.2	30.4-49.9
\$15,000-24,999	21.5	15.5-27.4
\$25,000-34,999	26.9	17.7-36.2
\$35,000-49,999	15.5	6.5-24.5
\$50,000+	7.3	1.9-12.6
<12 years of education	50.1	39.5-60.6
12 years of education	23.5	17.7-29.3
13-15 years of education	16.1	10.9-21.4
16+ years of education	9.7	5.7-13.7

**Figure 4. Adults aged 65 years and older who have lost all of their natural teeth due to decay or gum disease – New Hampshire, 1999-2002 and United States, 1999 and 2002**



**Comment:** There were strong associations between complete tooth loss (i.e., edentulism) and income and educational attainment. Persons with lower incomes and less education more likely to report loss of all their teeth. Edentulism can reduce quality of life, self-image, and daily functioning; it is preventable with good oral hygiene,

fluoridated water, and regular dental care. Patient and provider attitudes towards tooth retention also play an important role.

**Method:** This question was asked of all survey participants. Data analysis excluded persons responding “Don’t Know/Not Sure” or “Refused” to this question and was restricted to person  $\geq 65$  years of age. Data were available for New Hampshire for 1999, 2001 and 2002 and for the United States for 1999 and 2002.

**Healthy People 2010:** The *Healthy People 2010* objective is to reduce the proportion of adults 65 to 74 years of age who have had all their natural teeth extracted to 20% (#21-4). For New Hampshire in 2002, 20.1% (95% Confidence Interval 16.2%-24.0%) of persons 65 to 74 years of age had lost all their teeth.

**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Table 5. Main reason given by adults for not having visited a dentist in the past year – New Hampshire, 2001**

	Percent	95% Confidence Interval
No reason to go (no problems, no teeth)	32.7	29.2-36.2
Cost	27.9	24.3-31.5
Fear, apprehension, nervousness, dislike going	7.4	5.5-9.3
Other priorities	5.8	4.0-7.6
Have not thought of it	4.5	2.8-6.2
Do not have/know a dentist	4.0	2.6-5.5
Cannot get to office/clinic	2.3	1.3-3.3
Other	15.4	12.5-18.2

**Comment:** The most common reason for having not visited a dentist in the past year, “no reason to go”, was given more commonly as people grew older (13.6% among persons 18-24 years of age versus 70.1% among person 65 years of age and older). There were also significant associations for “no reason to go” with both income and educational attainment. Persons with higher incomes and more education were less likely to report “no reason to go” than persons with lower incomes and less education. The second most common reason “cost” was given less commonly as people grew older (48.6% among person 18-24 years of age versus 10.6% among persons 65 years of age and older).

**Method:** People who reported visiting a dentist or dental clinic in the past year and people who reported having their teeth cleaned in the past year were not asked this question. Data analysis excluded persons responding “Don’t Know/Not Sure” and “Refused” to this question. The data are based on a sample size of 879.

**Healthy People 2010:** No objective.

**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Table 6. Dental insurance coverage among adults – New Hampshire, 2001**

	Percent	95% Confidence Interval
All	60.3	58.6-62.0
Male	62.4	59.8-64.9
Female	58.4	56.1-60.7
18-24 years	59.4	52.9-65.9
25-34 years	68.7	64.9-72.5
35-44 years	71.7	68.6-74.8
45-54 years	72.7	69.4-76.1
55-64 years	58.5	54.0-63.0
65+ years	21.9	18.5-25.3
<\$15,000	24.4	17.3-31.5
\$15,000-24,999	38.8	33.5-44.0
\$25,000-34,999	49.9	44.8-55.0
\$35,000-49,999	58.6	54.2-62.9
\$50,000+	76.6	74.2-78.9
<12 years of education	44.6	37.7-51.4
12 years of education	54.9	51.7-58.2
13-15 years of education	61.6	58.2-65.0
16+ years of education	67.6	64.9-70.2

**Comment:** Insurance coverage was highest among persons 25-54 years of age and was lower among young adults (18-24 years of age) and older adults (55 years of age and older). Insurance coverage was also strongly associated with both income and educational attainment. Persons with higher incomes and more education were more likely to report dental insurance coverage.

The percentage of adults without insurance from this survey (40%) was substantially different than that reported from the Family Insurance Survey (25%) (Table 7). The reason for this difference is, in part, due to the age groups included in the two surveys. The Behavioral Risk Factor Surveillance System included adults  $\geq 18$  years of age whereas the Family Insurance Survey included adults 19-64 years of age.

**Method:** This question was asked of all survey participants. Data analysis excluded those responding “Don’t Know/Not Sure” or “Refused” to this question.

**Healthy People 2010:** There is no objective specific to dental insurance, however, there is an objective (#1-1) to increase the proportion of persons with health insurance to 100%.

**Healthy New Hampshire 2010:** There is no objective specific to dental insurance, however, there is an objective to increase the percentage of persons age 65 and under who have health insurance to 100%.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

## FAMILY INSURANCE SURVEY

**Table 7. Population under 65 years of age without dental insurance -- New Hampshire, 2001**

	Percentage	95% Confidence Interval
New Hampshire		
Adults (19-64 years of age)	25	24-26
Children ( $\leq 18$ years of age)	22	20-24
County		
Belknap		
Adults	31	24-38
Children	24	13-34
Carroll		
Adults	40	33-48
Children	35	24-46
Cheshire		
Adults	26	20-32
Children	22	14-30
Coos		
Adults	26	17-35
Children	17	6-28
Grafton		
Adults	26	21-31
Children	24	16-32
Hillsborough		
Adults	25	22-27
Children	23	19-27
Merrimack		
Adults	28	24-33
Children	27	19-35
Rockingham		
Adults	22	20-25
Children	21	17-25
Strafford		
Adults	19	15-24
Children	15	9-21
Sullivan		
Adults	27	20-34
Children	20	10-29

**Comment:** From this survey, approximately one-quarter of New Hampshire residents under 65 years of age lack dental insurance. Lack of coverage varies from a low of 19% among adults and 15% among children in Strafford County to a high of 40% among adults and 35% among children in Carroll County.

The percentage of adults without insurance from this survey (25%) was substantially different than that reported from the Behavioral Risk Factor Surveillance System (40%) (Table 6). The reason for this difference is, in part, due to the age groups included in the two surveys. The Family Insurance Survey included adults 19-64 years of age whereas the Behavioral Risk Factor Surveillance System included adults  $\geq 18$  years of age.

**Method:** The survey collected information on all residents under age 65 in selected households. Information was provided by an adult respondent in each household.

**Healthy People 2010:** There is no objective specific to dental insurance, however, there is an objective (#1-1) to increase the proportion of persons with health insurance to 100%.

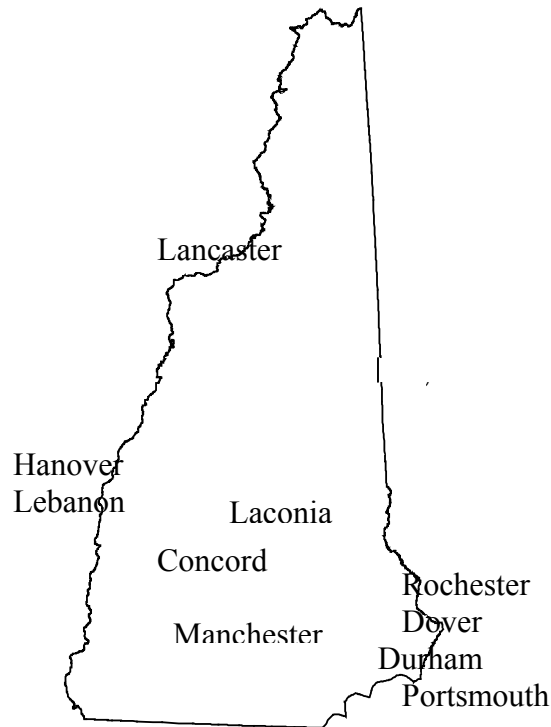
**Healthy New Hampshire 2010:** There is no objective specific to dental insurance, however, there is an objective to increase the percentage of persons age 65 and under who have health insurance to 100%.

**Data Source:** New Hampshire Department of Health and Human Services, Office of Health Planning and Medicaid.

## FLUORIDATION

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**Figure 5. Cities with Fluoridated Public Water Supplies -- New Hampshire, 2004**



**Comment:** Some residents of the following towns receive water from a neighboring community with a fluoridated water supply: Conway (from Fryeburg, Maine); Bow (from Concord); Rollinsford (from Dover); Lee (from Durham); Belmont and Gilford (from Laconia); Auburn, Bedford, Derry, Goffstown, Hooksett, and Londonderry (from Manchester), and Greenland, New Castle, Newington, and Rye (from Portsmouth).

Naturally occurring fluoride has been documented in water from many areas of New Hampshire. Because of variations in fluoride levels, individual wells should be tested to determine their fluoride content.

**Method:** Data on fluoridated community water systems is maintained by the Department of Environmental Services and the Department of Health and Human Services using the Water Fluoridation Reporting System (WFRS).

**Healthy People 2010:** Objective #21-9 is to increase the proportion of the U.S. population served by community water systems with optimally fluoridated water to 75%.

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to have 65% of the population served by community water systems with optimally fluoridated water. In New Hampshire in 2001, 43% of persons served by community water systems were receiving fluoridated water.

**Data Source:** New Hampshire Department of Environmental Services (5) and New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program.

**Table 8. Population Receiving Fluoridated Public Water – New Hampshire and United States, 2000**

	A	B	C
	Population	Population on public water supply system (B/A)	Population on public water supply system receiving fluoride (C/B)
New Hampshire	1,235,786	807,438 (65%)	347,007 (43%)
United States	281,421,906	246,120,616 (87%)	162,067,341 (66%)

**Comment:** New Hampshire has a smaller percentage of its population on a public water supply (65%) than does the United States (87%). New Hampshire also has a smaller percentage of its population on a public water supply who receive fluoridated water (43%) than does the United States (66%) (6).

**Method:** New Hampshire data on fluoridated community water systems is maintained by the Department of Environmental Services and the Department of Health and Human Services using the Water Fluoridation Reporting System (WFRS).

**Healthy People 2010:** The *Healthy People 2010* objective (#21-9) for the United States is to have 75% of the population served by community water systems with optimally fluoridated water. The percentage in 2000 was 66% ranging from a high of 100% in the District of Columbia to a low of 2% in Utah (6).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to have 65% of the population served by community water systems with optimally fluoridated water. In New Hampshire in 2000, 43% of persons served by community water systems were receiving fluoridated water.

**Data Source:** New Hampshire Department of Environmental Services (7); New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program; Centers for Disease Control and Prevention; and United States Census.

## HOSPITAL- AND COMMUNITY-BASED DENTAL PROGRAMS

**Table 9. Number of persons treated and children receiving sealants in hospital- and community-based dental programs – New Hampshire, 2002-2003**

Program	Number Treated	Number of Children Receiving Sealants
Ammonoosuc Community Health Svcs (Littleton)	74	0
Capital Region Family Health Center (Concord)	1,090	67
Catholic Medical Center – Poisson (Manchester)	1,090	142
Dental Health Works (Keene)	511	28
Dental Resource Center (Laconia)	2,298	260
Families First Dental Center (Portsmouth)	256	18
Greater Nashua Dental Connection (Nashua)	2,794	707
Healthreach Dental Center for Children (Exeter)	2,607	656
Lamprey Health Care (Raymond)	222	61
Total	10,942	1,939

**Comment:** These programs provide services to persons who would otherwise not have access to dental care.

**Method:** Information is reported by each program to the state's oral health program on an annual basis.

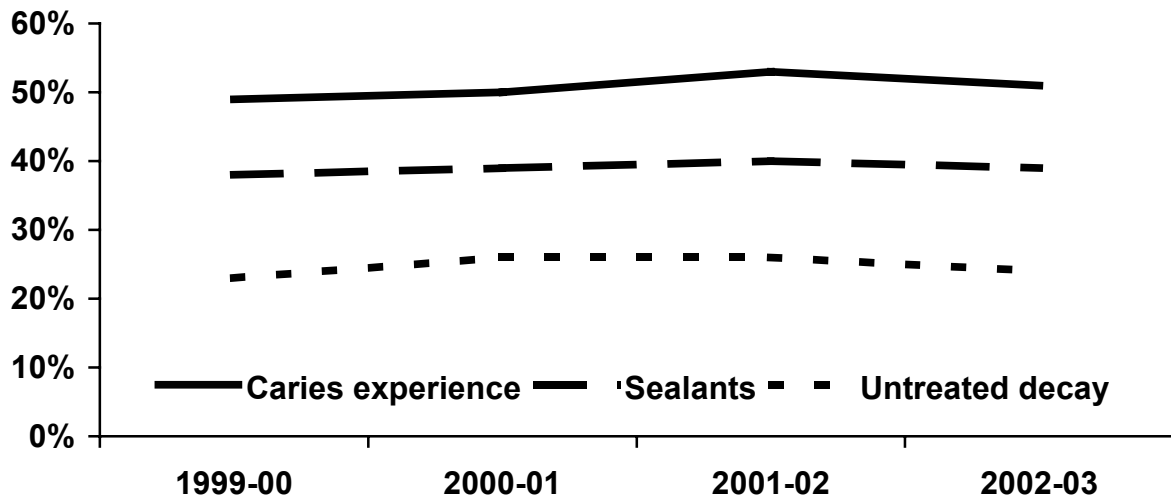
**Healthy People 2010:** Objective #21-10 is to increase the proportion of children and adults who use the oral health care system each year to 56%. Objective #21-8a is to increase the proportion of children aged 8 years who have received dental sealants on their molar teeth to 50% (#21-8a).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program.

## SCHOOL-BASED DENTAL PROGRAMS

**Figure 6. Percent of second and third grade students screened in school-based dental programs with caries experience, sealants, and untreated decay, by school year – New Hampshire, 1999-2003**



**Comment:** The percent of students screened who had caries experience, sealants and untreated decay has remained stable over the past four school years. Because these results represent only students participating in school-based programs, the data are not representative of all 2<sup>nd</sup> and 3<sup>rd</sup> graders in New Hampshire.

**Method:** Data are reported to the state's oral health program by each school-based dental program at the end of the academic year.

**Healthy People 2010:** The *Healthy People 2010* objectives are to reduce the proportion of 6 to 8 year old children with dental caries experience to 42% (#21-1b), to reduce the proportion of 6 to 8 year old children with untreated dental decay to 21% (#21-2b), and to increase the proportion of children aged 8 years who have received dental sealants on their molar teeth to 50% (#21-8a).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program; Manchester Health Department.

**Table 10. Number of 2<sup>nd</sup> and 3<sup>rd</sup> grade students screened and percent with untreated decay, caries experience, and sealants by school-based program – New Hampshire, 2002-2003**

Site	# Students	# Screened / # Students (%)	# Untreated Decay / # Screened (%)	# History of Decay / # Screened (%)	# Sealants / # Screened (%)
Alexander Eastman	2510	1345/2510 (54%)	188/1345 (14%)	512/1345 (38%)	597/1345 (44%)
Cheshire Smiles	1187	679/1187 (57%)	186/679 (27%)	327/679 (48%)	332/679 (49%)
Claremont	296	208/296 (70%)	88/208 (42%)	130/208 (63%)	42/208 (20%)
Coos County Family Hth Svc	321	179/321 (56%)	55/179 (31%)	103/179 (58%)	108/179 (60%)
Dental Resource Center	574	266/574 (46%)	57/266 (21%)	115/266 (43%)	112/266 (42%)
Frisbee Memorial Hospital	1371	699/1371 (51%)	266/699 (38%)	487/699 (70%)	330/699 (47%)
Health First Family Care Ctr	748	284/748 (38%)	39/284 (14%)	139/284 (49%)	60/284 (21%)
Healthreach Mobile Dent Pgm	933	195/933 (21%)	53/195 (27%)	91/195 (47%)	96/195 (49%)
Lamprey Health Care	779	361/779 (46%)	123/361 (34%)	204/361 (57%)	188/361 (52%)
Manchester	1820	1718/1820 (94%)	419/1718 (24%)	919/1718 (53%)	494/1718 (29%)
Miles of Smiles	144	75/144 (52%)	18/75 (24%)	35/75 (47%)	49/75 (65%)
Milford	365	365/365 (100%)	63/365 (17%)	145/365 (40%)	182/365 (50%)
Rock Dental Clinic	560	276/560 (49%)	62/276 (22%)	144/276 (52%)	101/276 (37%)
School Smiles	658	365/658 (55%)	72/365 (20%)	151/365 (41%)	98/365 (27%)
Seacoast Healthy Grins	339	256/339 (76%)	49/256 (19%)	104/256 (41%)	115/256 (45%)
Speare Memorial Hospital	387	338/387 (87%)	121/338 (36%)	259/338 (77%)	90/338 (27%)
Total	12992	7609/12992(59%)	1859/7609(24%)	3865/7609(51%)	2994/7609(39%)

**Comment:** Because these results represent only students participating in school-based programs, the data are not representative of all 2<sup>nd</sup> and 3<sup>rd</sup> graders in New Hampshire.

**Method:** Data are reported to the state's oral health program by each school-based dental program at the end of the academic year.

**Healthy People 2010:** The *Healthy People 2010* objectives are to reduce the proportion of 6 to 8 year old children with dental caries experience to 42% (#21-1b), to reduce the proportion of 6 to 8 year old children with untreated dental decay to 21% (#21-2b), and to

increase the proportion of children aged 8 years who have received dental sealants on their molar teeth to 50% (#21-8a).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program; Manchester Health Department.

**Table 11. Sealants applied through school-based dental programs -- New Hampshire, 2002-2003**

Site	Number of children receiving sealants
Cheshire Smiles	95
Claremont	15
Dental Resource Center	36
Health First Family Care Center	56
Manchester	43
Milford	68
Speare Memorial Hospital	36
Total	349

**Figure 12. Number of school-based or school-linked sealant programs and number of students receiving sealants by year – New Hampshire, 2000-2003**

	2000-01	2001-02	2002-03
Number of school-based or –linked sealant programs	3	5	7
Number of children sealed	254	201	349

**Comment:** Seven (44%) of 16 school-based programs offered sealants to students in 2002-03. Claremont, the Dental Resource Center, and Milford applied sealants in the schools. Manchester used a mobile dental van. Cheshire Smiles, Health First Family Care Center, and Speare Memorial Hospital arranged to have sealants applied in local dental offices.

**Method:** Data are reported to the state's oral health program by each school-based dental program at the end of the academic year.

**Healthy People 2010:** The *Healthy People 2010* objective is to increase the proportion of children aged 8 years who have received dental sealants on their molar teeth to 50% (#21-8a).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program; Manchester Health Department.

**Table 13. Services Provided By School-based Programs – New Hampshire, 2001-2002**

	Number of Programs
Grades served: Kindergarten	10
1 <sup>st</sup> -3 <sup>rd</sup> grades	15
4 <sup>th</sup> grade	11
5 <sup>th</sup> grade	10
6 <sup>th</sup> grade	5
7-8 <sup>th</sup> grades	4
9-12 <sup>th</sup> grades	2
Number of dentists per program providing restorative treatment for children referred from school program	Median: 3 Range: 0-14
Programs with dentists providing restorative treatment for children referred from school program who:	
Donated their services	6
Accepted Medicaid	9
Accepted discounted payments	7
Required 100% of regular fees	8
School programs that bill Medicaid for:	
Preventive services provided in school	7
Restorative services provided outside school	3
Screening:	
Offered to all students in eligible grades	15
Screening done by hygienist	14
Screening done by dentist	3
Screening done with mirror	7
Screening done after active consent (e.g., signed consent from parent returned to school)	11
Prophylaxis:	
Teeth cleaning offered to all students	4
Teeth cleaning offered only to high risk students	12
Teeth cleaning includes scaling	13
Tooth polishing done with powered handpiece	12
Sealants:	
Applied in schools	4
Applied in organized program outside school	5

	Number of Programs
Fluoride products used:	
Foam	10
Gel	6
Mouth rinse	9
Varnish	2
Toothpaste	12
Fluoridated water:	
Program serves schools in fluoridated towns	4
Health Education:	
Individual instruction on brushing	14
Individual instruction on flossing	14
Individual instruction on regular dental visits	13
Individual instruction on limiting sweets	13
Individual instruction on avoiding alcohol and tobacco	4
Group instruction on brushing	14
Group instruction on flossing	13
Group instruction on regular dental visits	14
Group instruction on limiting sweets	14
Group instruction on avoiding alcohol and tobacco	6
Referrals:	
Program arranges for children to see local provider	12
Program provides financial support for children to see local providers	7
Program Oversight:	
Local dentist works in school with hygienist at least part of time	4
Community group oversees program	8

**Comment:** There is some variation in the services provided by school-based dental programs in New Hampshire. Decisions on what services to provide are usually made at the local level. Most efforts focus on prevention, as opposed to restorative treatment.

**Method:** Data were collected through a survey of all school-based programs in the state in 2002.

**Healthy People 2010:** Objective #21-12 is to increase the proportion of low-income children and adolescents who received any preventive dental service during the past year and objective #21-13 is to increase the proportion of school-based health centers with an oral health component. Objective (#21-8a) is to increase the proportion of children aged 8 years who have received dental sealants on their molar teeth to 50%.

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program. Manchester Health Department.

## THIRD GRADE ORAL HEALTH SURVEY

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**Table 14. Percent of 3<sup>rd</sup> graders with untreated decay, caries experience, and sealants – New Hampshire, 2001**

	Percentage	95% Confidence Interval
Untreated decay	21.7	14.3-29.1
Caries experience	52.0	45.5-58.4
Sealants on permanent molars	45.9	37.7-54.0
Treatment urgency		
No obvious problem	69.8	62.7-76.8
Early dental care	25.1	19.1-31.2
Urgent care	5.1	3.0-7.3

**Comment:** Results from the 2001 New Hampshire oral health survey are similar to those collected by a survey in Maine in 1999. Results from other states that have conducted oral health surveys in schools are available at: <http://www.cdc.gov/nohss/>

**Method:** The survey was conducted from February-April, 2001. The survey design was adapted from the *Basic Screening Surveys* developed by the Association of State and Territorial Dental Directors.

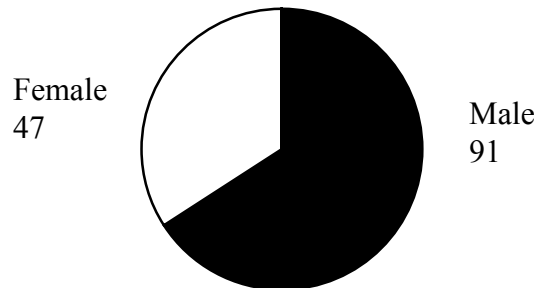
**Healthy People 2010:** The *Healthy People 2010* objectives are to reduce the proportion of 6 to 8 year old children with dental caries experience to 42% (#21-1b), to reduce the proportion of 6 to 8 year old children with untreated dental decay to 21% (#21-2b), and to increase the proportion of children aged 8 years who have received dental sealants on their permanent molar teeth to 50% (#21-8a).

**Healthy New Hampshire 2010:** The *Healthy New Hampshire 2010* objective is to increase the proportion of children in third grade who have received dental sealants on their permanent molar teeth. The specific target has not yet been established. In 2001 46% of children in third grade in New Hampshire had dental sealants.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Unit, Oral Health Program.

## CANCER REGISTRY AND VITAL STATISTICS

**Figure 7. New cases of oral cancer by sex – New Hampshire, 2000**



**Table 15. Incidence by sex – New Hampshire, 1996-2000**

	Age-adjusted incidence (per 100,000) New Hampshire, 1996-2000
All	10.5
Male	15.5
Female	6.4

**Comment:** Oral cancer consists of cancer of the lips, salivary glands, mouth, and throat. Approximately 75% of oral cancer is attributable to tobacco and alcohol use. Efforts to decrease oral cancer are dependent on control of these two risk factors along with early detection.

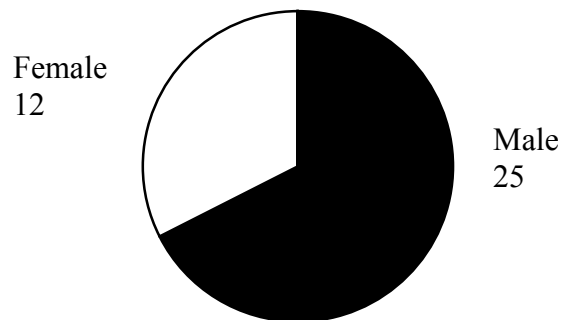
**Method:** Data are from the state cancer registry.

**Healthy People 2010:** Objective #3-6 is to reduce the oropharyngeal death rate to 2.7 per 100,000 population.

**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

**Figure 8. Mortality from oral cancer by sex – New Hampshire, 2001**



**Table 16. Mortality rate from oral cancer by sex – New Hampshire, 1997-2001**

	Age-adjusted mortality rate (per 100,000) New Hampshire, 1997-2001
All	3.3
Male	5.2
Female	1.9

**Comment:** Oral cancer consists of cancer of the lips, salivary glands, mouth, and throat. Approximately 75% of oral cancer is attributable to tobacco and alcohol use. Efforts to decrease oral cancer are dependent on control of these two risk factors along with early detection.

**Method:** Data are from death certificates.

**Healthy People 2010:** The *Healthy People 2010* objective (#3-6) is to reduce the oropharyngeal cancer death rate to 2.7 per 100,000 (age-adjusted to the 2000 population).

**Healthy New Hampshire 2010:** No objective.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Disease Control and Laboratory Sciences, Health Statistics and Data Management Section.

## YOUTH TOBACCO SURVEY

**Table 17. Middle and high school students who reported that a dentist or someone in a dentist's office talked to them about the danger of tobacco use during the past 12 months – New Hampshire, 2001**

	Percent	95% Confidence Interval
Middle School Students – Grades 6-8		
Counseled	13.6	11.9-15.3
Not counseled	75.3	72.4-78.2
Did not visit dentist	11.1	9.2-13.0
High School Students – Grades 9-12		
Counseled	11.8	9.9-13.7
Not Counseled	79.6	76.8-82.4
Did not visit dentist	8.6	6.5-10.7

**Comment:** Tobacco is the leading cause of preventable mortality and a major determinant of oral health. Dentists and dental hygienists should routinely counsel their patients, especially adolescents, about the dangers of tobacco use.

Sixth graders were more likely to have been counseled (17.2%) about the danger of tobacco use than were 12<sup>th</sup> graders (9.4%). There were no other significant differences in having been counseled by either gender or grade level. There was no significant differences between 7<sup>th</sup> and 8<sup>th</sup> graders surveyed in 2001 and those surveyed in 2000. The first New Hampshire Youth Tobacco Survey was conducted in 2000 among 7<sup>th</sup> and 8<sup>th</sup> grade students.

Approximately 10% of students in grades 6-12 did not see a dentist in the past year.

**Method:** Data are based on self-reports of a sample of students in public schools in New Hampshire.

**Healthy People 2010:** Objective #27-2a is to reduce tobacco use by adolescents to 21%. Objective #1-3 is to increase the proportion of people appropriately counseled about health behaviors.

**Healthy New Hampshire 2010:** Reduce the percentage of high school students who report current tobacco use to 24%. Increase the percentage of high school students who report never using tobacco to 43%.

**Data Source:** New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Prevention Services, Tobacco Prevention and Control Program.

## NATIONAL ORAL HEALTH SURVEILLANCE SYSTEM

Indicator	New Hampshire	Healthy New Hampshire 2010	United States	Healthy People 2010
Annual dental visit in persons $\geq 18$ years	77% (2002)	---	69% (2002)	---
Annual teeth cleaning in persons $\geq 18$ years	77% (2002)	---	69% (2002)	---
Complete tooth loss in persons $\geq 65$ years	22% (2002)	---	23% (2002)	20% among 65-74 year olds
Oral cancer deaths per 100,000 persons	3.3 (1996-00)	---	2.8 (1999)	2.7
Untreated caries in children 6-8 years	22% (2001)	---	---	21%
History of decay in children 6-8 years	52% (2001)	---	---	42%
Sealants in children 8 years	46% (2001)	Under development	---	50%
Fluoridation of public water supplies	43% (2001)	65%	66% (2000)	75%

**Comment:** For the eight indicators in the National Oral Health Surveillance System, New Hampshire is doing reasonably well for five measures: annual dental visits among adults, annual teeth cleaning among adults, complete tooth loss among the elderly, untreated decay among children 6-8 years of age, and sealants in children 8 years of age. Additional progress is needed to reach *Healthy People 2010* objectives for oral cancer deaths, history of decay in children 6-8 years of age, and fluoridation of public water supplies.

## CONCLUSIONS

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The data in this report indicate that oral health problems, such as dental caries in children and tooth loss in adults, are still common in New Hampshire. Effective preventive measures such as water fluoridation and dental sealants are under-utilized. The data also show marked disparities in oral health by socioeconomic status. Individuals who have lower incomes or less education are substantially more likely to be unable to access care and to have dental problems. Additional progress needs to be made if New Hampshire is to achieve the state and national oral health objectives established for the year 2010.

## CONTRIBUTORS

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